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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,616	03/22/2004	Alvin F. Beverley		2141

7590 03/23/2007
Alvin F. Beverley
334 Adwood Court
Newport News, VA 23605

EXAMINER

TILL, TERRENCE R

ART UNIT	PAPER NUMBER
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1744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/805,616

Applicant(s)

BEVERLEY, ALVIN F.

Examiner

Terrence R. Till

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The spacing of the lines of the specification is such as to make reading difficult. New application papers with lines 1½ or double spaced on good quality paper are required.
2. The spacing on page 4 appears to be single spaced.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 2, 3, 5 and 8-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. With respect to claim 2, applicant recites "The apparatus for unclogging AC unit's evaporator drain line according to claim 1 wherein includes a PVC tube". Wherein what includes a PVC tube, the apparatus as a whole or a part of the apparatus?
6. With respect to claim 6, is claim 6 independent or dependent on claim 1?
7. With respect to claims 3, 5 and 8-13, a series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim. A claim which depends from a dependent claim should not be separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In applicant's case the abovementioned claims refer to multiple claims, independent and dependent and are not even in the same dependent series. With respect to claim 3, the reference to claim 1 is not needed as

Art Unit: 1744

claim 2 already depends from claim 1. Claim 5 depends on claim 4, which depends on claim 1, but applicant also refers to claim 3 which depends on claim 2. Is the dependency chain 5 to 4 to 1 or 5 to 3 to 2 to 1?

8. For claim 8, is the dependency chain 8 to 7 to 6 (to 1) or 8 to 1?
9. For claim 9, is the dependency chain 9 to 1 or 9 to 4 to 1?
10. For claim 10, is the dependency chain 10 to 4 to 1 or 10 to 6 (to 1) or 10 to 2 to 1?
11. For claim 11, is the dependency chain 11 to 1 or 11 to 8 to 7 to 6 (to 1)?
12. For claims 12 and 13, the same question applies, what is the series of the dependency.
13. Claims 10, 12 and 13 will not have prior art applied as the scope of the claims cannot be determined with any degree of certainty.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 1744

16. Claims 1, 2, 6-9 and 11, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Arjomand (US 2005/0081891) in view of Sung-Sham (US 4,429,434).

The publication to Arjomand discloses an apparatus comprising a plastic plunger device 1,3,5, once engaged dislodges the debris and improves airflow output (see figure 4 and specification, paragraph 47). Arjomand does this by use of flap valves 81 and 86 in conjunction with reciprocating the plunger. Arjomand does not disclose an oblong rubber type plastic plunger device. The patent to Sung-sham discloses a manually operated vacuum device with an oblong, rubber-type plunger. Therefore, because these two vacuum generating means were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the piston plunger of Arjomand for an oblong, rubber-type plunger in view of the teaching to Sung-Sham. With respect to the limitation "for unclogging air conditioning unit's evaporator drain line", such is considered the intended use of the claimed invention. It should also be noted that once modified, Arjomand would be operated by squeezing the oblong rubber-type plunger multiple times. With respect to claim 2, Arjomand discloses a tube 7, but is not made of PVC plastic. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tube of Arjomand to be made of PVC, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. In re Leshin, 125 USPQ 416. With respect to claim 6, Arjomand discloses the claimed invention, including a "T" drain line flap valve 81 except for the valve being 1/8" in width. It would have been an obvious matter of engineering choice to a person skilled in the art at the time the invention was made to modify the valve of Arjomand to have a width of 1/8", since such a

Art Unit: 1744

modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *Gardner v. TEC systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984). With respect to claim 9, as best understood, the recitation of the unclogging drain line apparatus getting attached to 1/8" drain line opening is considered the intended use of the claimed invention.

17. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arjomand, as modified by Sung-Shan, as applied to claim 1 above, and further in view of Fortune (US 3,818,539).

18. Arjomand, as modified by Sung-Shan, does not disclose the apparatus includes the aid of a clear plastic tube component. The patent to Fortune discloses a vacuum apparatus with a clear plastic tube component 20 (see column 4, lines 10-20). Therefore, It would have been obvious to a person skilled in the art at the time the invention was made to provide the device of Arjomand, as modified by Sung-Shan, with a clear plastic tube component in view of the teaching of Fortune in order to inspect the contents vacuumed.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Arico, Mock, Domansky and Boughal show the current state of the art in vacuum and airblast manually operated cleaners.

Applicant is reminded that while an inventor may prosecute the application, lack of skill in this field may act as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to

Art Unit: 1744

prosecute the application, since the value of a patent is largely dependent upon skillful preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

Applicant is advised of the availability of the publication "Attorneys and Agents Registered to Practice Before the U.S. Patent and Trademark Office." This publication is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Applicant's financial situation is understood. However, it would be remiss of the examiner to not suggest counsel.

If Applicant wishes to continue prosecution representing himself/herself, the following is a quotation from 37 C.F.R. 1.121 and a certificate of mailing form that may prove helpful to the Applicant when filing a response.

§ 1.121 Manner of making amendments in applications.

(a) Amendments in applications, other than reissue applications. Amendments in applications, other than reissue applications, are made by filing a paper, in compliance with § 1.52, directing that specified amendments be made.

(b) Specification. Amendments to the specification, other than the claims, computer listings (§ 1.96) and sequence listings (§ 1.825), must be made by adding, deleting or replacing a paragraph, by replacing a section, or by a substitute specification, in the manner specified in this section.

(1) Amendment to delete, replace, or add a paragraph. Amendments to the specification, including amendment to a section heading or the title of the invention which are considered for amendment purposes to be an amendment of a paragraph, must be made by submitting:

(i) An instruction, which unambiguously identifies the location, to delete one or more paragraphs of the specification, replace a paragraph with one or more replacement paragraphs, or add one or more paragraphs;

(ii) The full text of any replacement paragraph with markings to show all the changes relative to the previous version of the paragraph. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strikethrough cannot be easily perceived;

(iii) The full text of any added paragraphs without any underlining; and

(iv) The text of a paragraph to be deleted must not be presented with strike-through or placed within double brackets. The instruction to delete may identify a paragraph by its paragraph number or include a few words from the beginning, and end, of the paragraph, if needed for paragraph identification purposes.

(2) Amendment by replacement section. If the sections of the specification contain section headings as provided in § 1.77(b), § 1.154(b), or § 1.163(c), amendments to the specification, other than the claims, may be made by

Art Unit: 1744

submitting:

- (i) A reference to the section heading along with an instruction, which unambiguously identifies the location, to delete that section of the specification and to replace such deleted section with a replacement section; and;
 - (ii) A replacement section with markings to show all changes relative to the previous version of the section. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived.
- (3) Amendment by substitute specification . The specification, other than the claims, may also be amended by submitting:
- (i) An instruction to replace the specification; and
 - (ii) A substitute specification in compliance with §§ 1.125(b) and (c).
- (4) Reinstatement of previously deleted paragraph or section . A previously deleted paragraph or section may be reinstated only by a subsequent amendment adding the previously deleted paragraph or section.
- (5) Presentation in subsequent amendment document . Once a paragraph or section is amended in a first amendment document, the paragraph or section shall not be represented in a subsequent amendment document unless it is amended again or a substitute specification is provided.
- (c) Claims . Amendments to a claim must be made by rewriting the entire claim with all changes (e.g., additions and deletions) as indicated in this subsection, except when the claim is being canceled. Each amendment document that includes a change to an existing claim, cancellation of an existing claim or addition of a new claim, must include a complete listing of all claims ever presented, including the text of all pending and withdrawn claims, in the application. The claim listing, including the text of the claims, in the amendment document will serve to replace all prior versions of the claims, in the application. In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).
- (1) Claim listing. All of the claims presented in a claim listing shall be presented in ascending numerical order. Consecutive claims having the same status of “canceled” or “not entered” may be aggregated into one statement (e.g., Claims 1–5 (canceled)). The claim listing shall commence on a separate sheet of the amendment document and the sheet(s) that contain the text of any part of the claims shall not contain any other part of the amendment.
- (2) When claim text with markings is required. All claims being currently amended in an amendment paper shall be presented in the claim listing, indicate a status of “currently amended,” and be submitted with markings to indicate the changes that have been made relative to the immediate prior version of the claims. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the

Art Unit: 1744

deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. Only claims having the status of "currently amended," or "withdrawn" if also being amended, shall include markings. If a withdrawn claim is currently amended, its status in the claim listing may be identified as "withdrawn—currently amended."

(3) When claim text in clean version is required. The text of all pending claims not being currently amended shall be presented in the claim listing in clean version, i.e., without any markings in the presentation of text. The presentation of a clean version of any claim having the status of "original," "withdrawn" or "previously presented" will constitute an assertion that it has not been changed relative to the immediate prior version, except to omit markings that may have been present in the immediate prior version of the claims of the status of "withdrawn" or "previously presented." Any claim added by amendment must be indicated with the status of "new" and presented in clean version, i.e., without any underlining.

(4) When claim text shall not be presented; canceling a claim.

(i) No claim text shall be presented for any claim in the claim listing with the status of "canceled" or "not entered."

(ii) Cancellation of a claim shall be effected by an instruction to cancel a particular claim number. Identifying the status of a claim in the claim listing as "canceled" will constitute an instruction to cancel the claim.

(5) Reinstatement of previously canceled claim. A claim which was previously canceled may be reinstated only by adding the claim as a "new" claim with a new claim number.

(d) Drawings : One or more application drawings shall be amended in the following manner: Any changes to an application drawing must be in compliance with § 1.84 and must be submitted on a replacement sheet of drawings which shall be an attachment to the amendment document and, in the top margin, labeled "Replacement Sheet". Any replacement sheet of drawings shall include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is amended. Any new sheet of drawings containing an additional figure must be labeled in the top margin as "New Sheet". All changes to the drawings shall be explained, in detail, in either the drawing amendment or remarks section of the amendment paper.

(1) A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be included. The marked-up copy must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change to the drawings.

(2) A marked-up copy of any amended drawing figure, including annotations indicating the changes made, must be provided when required by the examiner.

(e) Disclosure consistency. The disclosure must be amended, when required by the Office, to correct inaccuracies of description and definition, and to secure substantial correspondence between the claims, the remainder of the specification, and the drawings.

(f) No new matter. No amendment may introduce new matter into the disclosure

Art Unit: 1744

of an application.

(g) Exception for examiner's amendments. Changes to the specification, including the claims, of an application made by the Office in an examiner's amendment may be made by specific instructions to insert or delete subject matter set forth in the examiner's amendment by identifying the precise point in the specification or the claim(s) where the insertion or deletion is to be made. Compliance with paragraphs (b)(1), (b)(2), or (c) of this section is not required.

(h) Amendment sections. Each section of an amendment document (e.g., amendment to the claims, amendment to the specification, replacement drawings, and remarks) must begin on a separate sheet.

(i) Amendments in reissue applications. Any amendment to the description and claims in reissue applications must be made in accordance with § 1.173.

(j) Amendments in reexamination proceedings. Any proposed amendment to the description and claims in patents involved in reexamination proceedings must be made in accordance with § 1.530.

(k) Amendments in provisional applications. Amendments in provisional applications are not usually made. If an amendment is made to a provisional application, however, it must comply with the provisions of this section. Any amendments to a provisional application shall be placed in the provisional application file but may not be entered.

[32 FR 13583, Sept. 28, 1967; 46 FR 29183, May 29, 1981; para. (e), 49 FR 555, Jan. 4, 1984, effective Apr. 1, 1984; revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997; revised, 65 FR 54604, Sept. 8, 2000, effective Nov. 7, 2000; para. (i) revised, 65 FR 76756, Dec. 7, 2000, effective Feb. 5, 2001; revised, 68 FR 38611, June 30, 2003, effective July 30, 2003; para. (d) revised, 69 FR 56481, Sept. 21, 2004, effective Oct. 21, 2004]

It is called to applicant's attention that if a communication is mailed before the response time has expired applicant may submit the response with a "Certificate of Mailing" which merely asserts that the response is being mailed on a given date. So mailed, before the period for response has lapsed, the response is considered timely. A suggested format for a certificate follows:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents
Washington, D.C. 20231
on _____ (date).

Typed or printed name of person signing this certificate

Signature _____

Date _____

Art Unit: 1744

If Applicant believes an extension of time is needed, the following guidelines for a petition is suggested:

'The applicant herewith petitions the Commissioner of Patents and Trademarks to extend the time for response to the Office action dated ____ for ____ month(s) from ____ to ____ Submitted herewith is a check for ____ to cover the cost of the extension [Please Charge my deposit account number ____ , in the amount of ____ to cover the cost of the extension. Any deficiency or overpayment should be charged or credited to the above numbered deposit account.]'

The fees are as follows:

1 month=	\$55.00
2 months=	\$195.00
3 months=	\$445.00

If a time extension has been paid and another is needed, the additional amount needed is the difference between the amount paid of the recorded extension and the time extension needed.

With the response, applicant should include a self addressed, stamped post card, which includes applicant's application serial number and the contents of applicant's response (pages of amendments, drawing changes, fee extensions, etc.). **THIS POSTCARD IS THE ONLY PROOF OF WHAT APPLICANT SUBMITTED TO THE OFFICE, SHOULD THE PAPERS BECOME LOST.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Till whose telephone number is (571) 272-1280. The examiner can normally be reached on Mon. through Thurs. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys P. Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Terrence R. Till
Primary Examiner
Art Unit 1744

trt